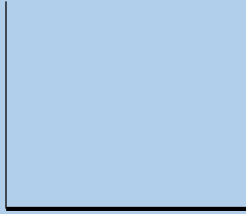# Year 5
Angles Session 1
Mrs Yeandle

Hello Year 5.
How are you all? I hope you are all well.

We are going to move on from the work we have been doing on fractions and decimals and begin to look at Properties of shapes.

The first few sessions that we do will be looking at angles.

What is an angle?

An angle is the space between two intersecting(joining) lines, it is measured in degrees

In geometry there are different types of angles,
*acute an angle between 0 and 90 degrees,
*right-angle a 90-degree angle,
*obtuse an angle that falls between 90 and 180 degrees
*straight angle one that is a line of 180 degrees.
*reflex angle an angle greater than 180 degrees

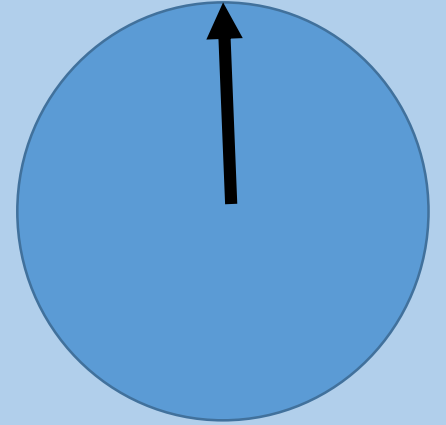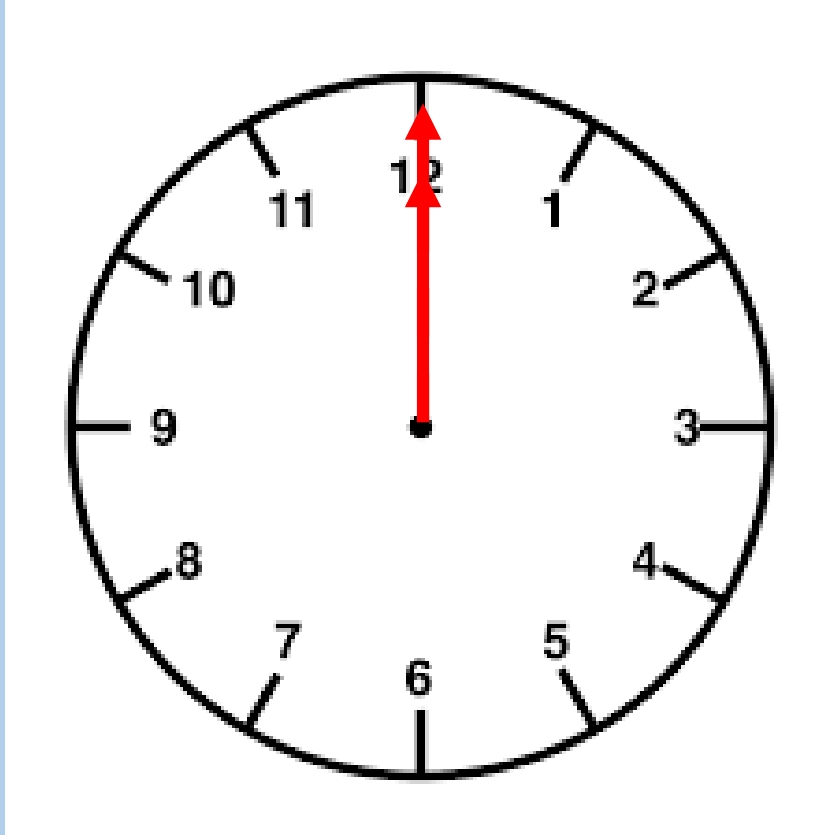https://www.bbc.co.uk/bitesize/topics/zb6tyrd/articles/zg68k7h

This link talks about degrees.

It talks about 360° being a full turn.

180° = a half turn

90° = a right angle

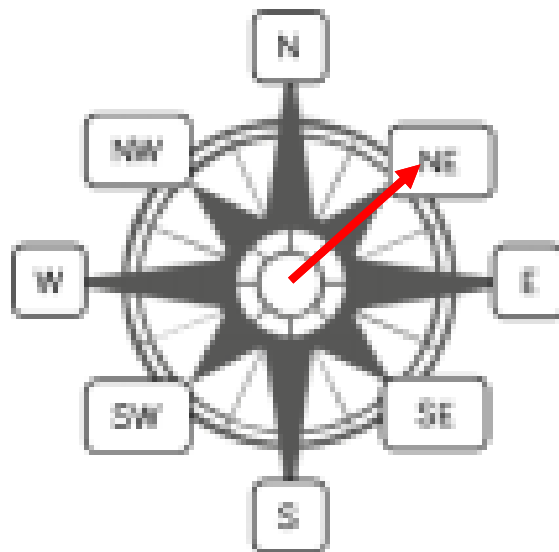Let's look at some angles of turn using the clock face.

The turn from 12 to 4 is .... than a right angle. It is .... than a straight line angle.
It is an .... angle.

The turn from 12 to 8 is .... than a right angle. It is .... than a straight line angle.
It is a .... angle.

The turn from 12 to 2 is .... than a right angle. It is .... than a straight line angle.
It is an .... angle.

Use the compass to complete the table.

| Turn	Degrees	Type of angle	Fraction of a turn
North-East to South-East Clockwise	90°	Right angle	$\frac{1}{4}$ of a turn
North-West to North-West Clockwise			
South-West to South-East Anti-clockwise			
South-West to _____ Clockwise	180°		
North-East to East Clockwise			$\frac{1}{8}$ of a turn

1 Eva is facing her house.
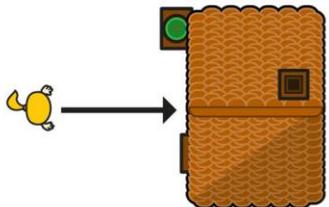
She makes a full turn.

a) What is Eva facing now? _____

b) How many degrees has Eva turned through?

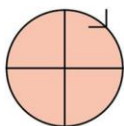[   ] degrees

2 Mo is facing his school.
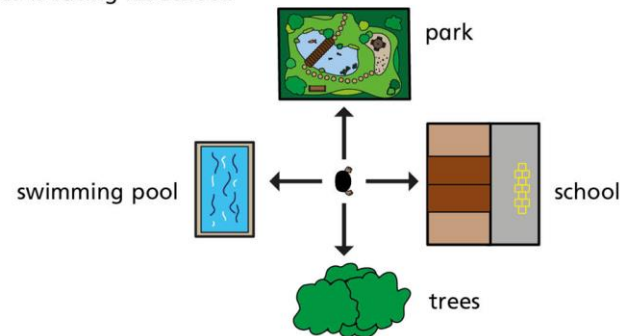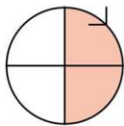

Mo makes a half turn.

a) What is Mo facing now? _____

b) How many degrees did Mo turn through? [   ] degrees
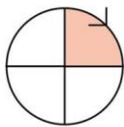
3 Complete the sentences.
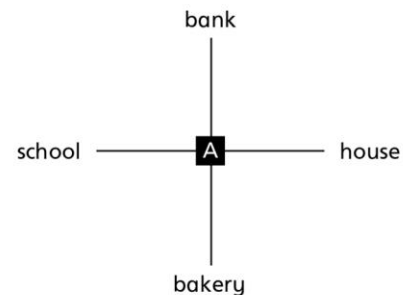
a) There are [   ] degrees in a full turn.

b) There are [   ] degrees in half a full turn.

c) There are [   ] degrees in quarter of a full turn.

5 Amir, Annie, Jack and Filip are standing at point A.

a) Amir is facing the bank. He turns 90 degrees clockwise.

What is Amir facing now? _____

Always, sometimes or never true?

- If I turn from North-East to North-West, I have turned 90°
- If I turn from East to North-West, I will have turned through an obtuse angle.
- If I turn from South-West to South, my turn will be larger than 350°